

66. (NEW) A method of monitoring a haemodynamic function of one of a human and animal subject to facilitate application of an anaesthetic dose to the subject, the method comprising the step of:

monitoring blood flow in one of a peripheral blood vessel and a tissue bed;

generating an indication of changes in the monitored blood flow in one of peripheral blood vessel and as a cardiac output; and

varying administration of the anaesthetic dose to the subject based upon the cardiac output.

67. (NEW) The method in accordance with claim 66, further comprising the step of monitoring a relative change in blood flow to provide an indication of a relative change in cardiac output.

68. (NEW) The method in accordance with claim 66, further comprising the step of carrying out the monitoring blood flow step non-invasively.

69. (NEW) The method in accordance with claim 66, further comprising the step of carrying out the monitoring blood flow step continuously.

70. (NEW) The method in accordance with claim 66, further comprising the step of setting a predetermined limit for a blood flow rate, and outputting an alarm which indicates an alarm condition when the blood flow rate reaches the predetermined limit.

71. (NEW) The method in accordance with claim 66, further comprising the step of pre-setting one of (1) a base reference level for the blood flow rate indicative of a blood flow level of the subject at rest prior to monitoring of the haemodynamic function and (2) an average flow level for a particular type of subject prior to monitoring of haemodynamic function.

72. (NEW) The method in accordance with claim 66, further comprising the step of, during monitoring the blood flow, employing a device which produces a signal which varies with variations in the blood flow rate, and

processing the signal to produce an output providing an indication of variations in cardiac output.

73. (NEW) The method in accordance with claim 72, further comprising the step of modifying the signal by an adjustment factor obtained by a regression analysis of the subject.

74. (NEW) The method in accordance with claim 72, further comprising the step of modifying the signal by an adjustment factor obtained from a co-variate parameter.

75. (NEW) The method in accordance with claim 74, further comprising the step of using a heart rate of the subject as the co-variate parameter.

76. (NEW) The method in accordance with claim 66, further comprising the step of applying a Doppler effect to monitor blood flow.

~~9~~<sup>11</sup> (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of employing an infrared blood flow sensor to monitor the blood flow.

~~10~~<sup>18</sup> (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of employing an electromagnetic flow meter to monitor the blood flow.

~~11~~<sup>20</sup> (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of employing a color chart to monitor the blood flow, and

comparing a color of a predetermined part of a body of the subject with the color chart to provide an indication of cardiac output.

~~12~~<sup>20</sup> (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of monitoring the color of a part of a body of the subject to monitor the blood flow.

~~7~~<sup>81</sup> (NEW) The method in accordance with claim ~~71~~<sup>6</sup>, further comprising the step of processing the signal to produce a display which indicates the trend of the cardiac output.

~~20~~<sup>82</sup> (NEW) A device for monitoring haemodynamic function in one of a human and animal subject to facilitate application of an anaesthetic dose to the subject, the device comprising;

a blood flow monitor for monitoring changes in blood flow of one of a peripheral vessel and tissue bed, the blood flow monitor including a mechanism to provide an indication of changes in cardiac output; and

means for varying administration of the anaesthetic dose to the subject based upon the cardiac output.

~~21~~<sup>83</sup> (NEW) The device in accordance with claim ~~82~~<sup>20</sup>, wherein the blood flow monitor is arranged to monitor a relative change in blood flow of the subject to provide an indication of a relative change in cardiac output.

~~24~~<sup>84</sup> (NEW) The device in accordance with claim ~~82~~<sup>20</sup>, wherein the device further includes processing means for processing a signal from the blood flow monitor to produce an output signal which provides an indication of changes in cardiac output.

~~27~~<sup>85</sup> (NEW) The device in accordance with claim ~~84~~<sup>26</sup>, wherein the processing means is arranged to adjust the signal by an adjustment factor obtained from a regression analysis of the subject.

~~28~~<sup>86</sup> (NEW) The device in accordance with claim ~~84~~<sup>26</sup>, wherein the processing means adjusts the signal by an adjustment factor obtained from a co-variate.

~~29~~<sup>87</sup> (NEW) The device in accordance with claim ~~86~~<sup>28</sup>, wherein the co-variate input is a heart rate of the subject.

~~22~~<sup>88</sup> (NEW) The device in accordance with claim ~~82~~<sup>20</sup>, wherein the blood flow monitor comprises a Doppler sensor adapted to monitor blood flow changes.

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23 ~~80~~ (NEW) The device in accordance with claim ~~82~~<sup>50</sup>, wherein the blood flow monitor comprises an infrared sensor for monitoring blood flow.

24 ~~90~~ (NEW) The device in accordance with claim ~~82~~<sup>20</sup>, wherein the blood flow monitor comprises an electromagnetic flow meter.

30 ~~91~~ (NEW) The device in accordance with claim ~~84~~<sup>26</sup>, wherein the device further comprises a display, and the processing means is arranged to control the display to provide an indication of changes in the cardiac output in the subject.

31 ~~92~~ (NEW) The device in accordance with claim ~~91~~<sup>30</sup>, wherein the device is arranged to display a base reference value to be compared with a monitored value generated during monitoring of haemodynamic function.

32 ~~93~~ (NEW) The device in accordance with claim ~~91~~<sup>30</sup>, wherein the device displays a trend analysis for changes in cardiac output which shows the trend of the changes in cardiac output.

25 ~~94~~ (NEW) The device in accordance with claim ~~82~~<sup>20</sup>, wherein the blood flow monitor includes a color chart and the color chart can be compared with a color of a predetermined part of a body of the subject.

17 ~~95~~ (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of monitoring the haemodynamic function of the subject during anaesthesia.

18 ~~96~~ (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of monitoring the haemodynamic function during critical care in a hospital.

19 ~~97~~ (NEW) The method in accordance with claim ~~86~~<sup>1</sup>, further comprising the step of monitoring a haemodynamic function during a stress test of the subject.

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